

Title (en)

Process and system for generating stereoscopic images from monocular images

Title (de)

Verfahren und System zur Erzeugung stereoskopischer Bilder aus monokularen Bildern

Title (fr)

Procédé et système pour la génération des images stéréoscopiques à partir d'images monoculaires

Publication

**EP 1353518 A1 20031015 (EN)**

Application

**EP 02425218 A 20020409**

Priority

EP 02425218 A 20020409

Abstract (en)

To generate, from at least on monocular image (12), at least one image with stereoscopic effect (18, 20), a depth map is provided (14) of said monocular image (a). The depth map in question defines a mapping of the objects present in the monocular image in relation to their spatial position in the direction of depth. For the pixels included in the monocular image and as a function of the depth map, respective parallax values are determined (16) indicative of a respective quantity of movement by which each pixel must be moved in the image with stereoscopic effect (18, 20) in relation to the monocular image (12). A movement corresponding to the respective quantity thus defined is then applied to the pixels of the monocular image (12), if necessary dividing it between two images of a stereoscopic pair (18, 20). Post-processing (22) of the image generated is also envisaged, to eliminate artifacts such as superimposed areas between moved pixels, a lateral edge of the image or gaps between objects included in said image generated as a result of the aforesaid movement of pixels. <IMAGE>

IPC 1-7

**H04N 13/00**

IPC 8 full level

**H04N 13/122** (2018.01); **H04N 13/128** (2018.01)

CPC (source: EP US)

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Citation (search report)

- [X] US 5929859 A 19990727 - MEIJERS PATRICK F P [NL]
- [A] US 6031538 A 20000229 - CHUPEAU BERTRAND [FR], et al

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